

WEST Search History

DATE: Tuesday, September 30, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
L4	5556776	4	L4
L3	L2 with sucrose	1	L3
L2	pts near3 ii	6223	L2
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L1	pts near3 ii	694	L1

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 4 of 4 returned.☐ 1. Document ID: US 20030049804 A1

L4: Entry 1 of 4

File: PGPB

Mar 13, 2003

PGPUB-DOCUMENT-NUMBER: 20030049804
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030049804 A1

TITLE: Corynebacterium glutamicum genes encoding metabolic pathway proteins

PUBLICATION-DATE: March 13, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Pompejus, Markus	Freinsheim		DE	
Kroger, Burkhard	Limburgerhof		DE	
Schroder, Hartwig	Nussloch		DE	
Zelder, Oskar	Speyer		DE	
Haberhauer, Gregor	Limburgerhof		DE	
Kim, Jun-Won	Seoul		KR	
Lee, Heung-Shick	Seoul		KR	
Hwang, Byung-Joon	Seoul		KR	

US-CL-CURRENT: 435/115; 435/183, 435/252.3, 435/320.1, 435/69.1, 536/23.2

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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FORM	Draw Desc	Image
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☐ 2. Document ID: US 5556776 A

L4: Entry 2 of 4

File: USPT

Sep 17, 1996

US-PAT-NO: 5556776
DOCUMENT-IDENTIFIER: US 5556776 A

TITLE: Sucrase gene derived from coryneform bacteria

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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FORM	Draw Desc	Image
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☐ 3. Document ID: EP 724017 A2 BR 9600268 A FR 2729970 A1 SK 9600112 A3 JP 08196280 A ZA 9600656 A EP 724017 A3

L4: Entry 3 of 4

File: DWPI

Jul 31, 1996

DERWENT-ACC-NO: 1996-343532
DERWENT-WEEK: 199806
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TITLE: Sucrase gene from Coryneform bacteria - used to prepare recombinant microorganisms for improved prodn. of L-amino acids and nucleic acids by fermentation of sucrose

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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MMIC	Draw Desc	Clip Img	Image
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☐ 4. Document ID: JP 05244958 A JP 3298135 B2 US 5556776 A

L4: Entry 4 of 4

File: DWPI

Sep 24, 1993

DERWENT-ACC-NO: 1993-338924

DERWENT-WEEK: 200246

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TITLE: New sucrase gene derived from Coryneform sp. - has restriction enzyme cleaving site, and encodes sucrase activity

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
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MMIC	Draw Desc	Image
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5556776

4

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NEWS 3 SEP 09 CA/CAPLUS records now contain indexing from 1907 to the
present
NEWS 4 Jul 15 Data from 1960-1976 added to RDISCLOSURE
NEWS 5 Jul 21 Identification of STN records implemented
NEWS 6 Jul 21 Polymer class term count added to REGISTRY
NEWS 7 Jul 22 INPADOC: Basic index (/BI) enhanced; Simultaneous Left and
Right Truncation available
NEWS 8 AUG 05 New pricing for EUROPATFULL and PCTFULL effective
August 1, 2003
NEWS 9 AUG 13 Field Availability (/FA) field enhanced in BEILSTEIN
NEWS 10 AUG 15 PATDPAFULL: one FREE connect hour, per account, in
September 2003
NEWS 11 AUG 15 PCTGEN: one FREE connect hour, per account, in
September 2003
NEWS 12 AUG 15 RDISCLOSURE: one FREE connect hour, per account, in
September 2003
NEWS 13 AUG 15 TEMA: one FREE connect hour, per account, in
September 2003
NEWS 14 AUG 18 Data available for download as a PDF in RDISCLOSURE
NEWS 15 AUG 18 Simultaneous left and right truncation added to PASCAL
NEWS 16 AUG 18 FROSTI and KOSMET enhanced with Simultaneous Left and Right
Truncation
NEWS 17 AUG 18 Simultaneous left and right truncation added to ANABSTR
NEWS 18 SEP 22 DIPPR file reloaded
NEWS 19 SEP 25 INPADOC: Legal Status data to be reloaded
NEWS 20 SEP 29 DISSABS now available on STN

NEWS EXPRESS April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT
MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003

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NEWS WWW CAS World Wide Web Site (general information)

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=> fil .eliz

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0.21

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=> s pts (3a) ii
L1 9200 PTS (3A) II

=> s l1 (5a) sucrose
L2 20 L1 (5A) SUCROSE

=> dup rem l2
PROCESSING COMPLETED FOR L2
L3 7 DUP REM L2 (13 DUPLICATES REMOVED)

=> d 1-7

L3 ANSWER 1 OF 7 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AN 2001-06288 BIOTECHDS
TI Gene encoding sucrose phosphoenolpyruvate-sugar transport system enzyme
II obtained by cassette ligation-mediated amplification of downstream
domain of Coryneform bacterium sucrose gene, with sucrose-binding
activity;
involving polymerase chain reaction
AU Izui M; Sugimoto M; Nakamatsu T; Kurahashi O
PA Ajinomoto
LO Tokyo, Japan.
PI WO 2001002584 11 Jan 2001
AI WO 2000-JP4348 30 Jun 2000
PRAI JP 1999-189512 2 Jul 1999
DT Patent
LA Japanese

OS WPI: 2001-138150 [14]

L3 ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 1
AN 2000427132 MEDLINE
DN 20391269 PubMed ID: 10937490
TI Analysis of a catabolic operon for sucrose transport and metabolism in
Clostridium acetobutylicum ATCC 824.
AU Tangney M; Mitchell W J
CS Department of Biological Sciences, Heriot-Watt University, Riccarton,
Edinburgh, UK.. m.tangney@hw.ac.uk
SO JOURNAL OF MOLECULAR MICROBIOLOGY AND BIOTECHNOLOGY, (2000 Jan) 2 (1)
71-80.
Journal code: 100892561. ISSN: 1464-1801.
CY ENGLAND: United Kingdom
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-AF205034
EM 200009
ED Entered STN: 20000922
Last Updated on STN: 20030325
Entered Medline: 20000908

L3 ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 2
AN 94114598 MEDLINE
DN 94114598 PubMed ID: 8286440
TI Evidence for a phosphoenolpyruvate dependent sugar-phosphotransferase
system in the mollicute Acholeplasma florum.
AU Navas-Castillo J; Laigret F; Hocquellet A; Chang C J; Bove J M
CS Laboratoire de biologie cellulaire et moleculaire, Institut National de la
Recherche Agronomique et Universite de Bordeaux II, Villenave d'Ornon,
France.
SO BIOCHIMIE, (1993) 75 (8) 675-9.
Journal code: 1264604. ISSN: 0300-9084.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
OS GENBANK-Z19057
EM 199402
ED Entered STN: 19940312
Last Updated on STN: 19940312
Entered Medline: 19940223

L3 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN
AN 1989:471946 HCAPLUS
DN 111:71946
TI Genetics of the phosphotransferase system of Bacillus subtilis
AU Fouet, A.; Arnaud, M.; Klier, A.; Rapoport, G.
CS Inst. Pasteur, Paris, 75724, Fr.
SO FEMS Microbiology Reviews (1989), 63(1-2), 175-82
CODEN: FMREE4; ISSN: 0168-6445
DT Journal; General Review
LA English

L3 ANSWER 5 OF 7 LIFESCI COPYRIGHT 2003 CSA on STN DUPLICATE 3
AN 88:19244 LIFESCI
TI Mechanisms of sugar transport in the rumen bacterium Selenomonas
ruminantium .
AU Martin, S.A.; Russell, J.B.
CS Anim. and Dairy Sci. Dep., Livest.-Poult. Build., Univ. Georgia, Athens,
GA 30602, USA
SO J. GEN. MICROBIOL., (1988) vol. 134, no. 3, pp. 819-827.
DT Journal
FS J
LA English
SL English

L3 ANSWER 6 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1967-09968G [00] WPIDS
TI Stabilised nitrofurazone compns.
DC B00 C00
PA (ROGA) ROGAR LTD
CYC 1
PI CA 763930 A (196800)*
PRAI CA 1964-897914 19640313

L3 ANSWER 7 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AN 1966-28322F [00] WPIDS
TI Stabilised nitrofurazone compns.
DC B00 C00
PA (ROGA) ROGAR LTD
CYC 1
PI CA 763930 A (196800)*
PRAI CA 1964-897914 19640313

=> d 1-7 kwic

L3 ANSWER 1 OF 7 BIOTECHDS COPYRIGHT 2003 THOMSON DERWENT/ISI on STN
AB . . . glucose only or sucrose, and can have improved amino acid and
nucleic acid productivity. In an example, the gene encoding
sucrose PTS enzyme II was isolated from the
chromosomal DNA of *Brevibacterium lactofermentum* AJ2036 (FERM BY-734) by
Southern hybridization. Then, transformants with **sucrose**
PTS enzyme II gene and with disruption of such gene
were constructed for production of glucose and sucrose, indicating that
AJ12036 produced both. . .

L3 ANSWER 2 OF 7 MEDLINE on STN DUPLICATE 1
AB . . . encoding the proteins of this pathway were identified from the *C.*
acetobutylicum genome sequence, in the order scrAKB encoding Enzyme
II of the **sucrose PTS**, fructokinase and
sucrose 6-phosphate hydrolase respectively. While the pathway for
sucrose metabolism is conserved between *C. acetobutylicum* and *C.*
beijerinckii, the operons show. . .

L3 ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 2
AB . . . but not a glucose-PTS, and that the amino acid sequence deduced
from the DNA fragment is related to beta-glucoside and **sucrose**
enzymes **II** of **PTS** from various bacteria.

L3 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN
AB . . . distribution of phosphotransferase system (PTS)-sugars in *B.*
subtilis, enzyme components of the PTS, and the amino acid sequences of
three **PTS** enzymes **II** involved in **sucrose**
metab.

L3 ANSWER 5 OF 7 LIFESCI COPYRIGHT 2003 CSA on STN DUPLICATE 3
AB . . . phosphorylate glucose and sucrose. Glucose activity was
constitutive, while phosphorylation of sucrose was inducible. Competition
experiments indicated that separate phosphotransferase (**PTS**)
enzymes **II** were present for glucose and **sucrose**, but
it appeared that maltose was hydrolysed by an inducible extracellular
maltase and then transported by the glucose PTS. S. . .

L3 ANSWER 6 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AB . . .
esp. for addn. to poultry
drinking water.
(II) is pref. Pluronic F-68 of av. mol. wt. 8750. Carriers
include dextrose, lactose and **sucrose**. Typically at least 1 pt.
(II) mixed with 20 pts. (I).

L3 ANSWER 7 OF 7 WPIDS COPYRIGHT 2003 THOMSON DERWENT on STN
AB . . .

esp. for addn. to poultry
drinking water.

(II) is pref. Pluronic F-68 of av. mol. wt. 8750. Carriers
include dextrose, lactose and **sucrose**. Typically at least 1 pt.
(II) mixed with 20 **pts**. (I).

=> d 3-5 ab

L3 ANSWER 3 OF 7 MEDLINE on STN DUPLICATE 2
AB In order to confirm the presence of a phosphoenolpyruvate (PEP)-dependent
sugar-phosphotransferase system (PTS) in the mollicute *Acholeplasma florum*
we studied the ability of cell free extracts of this organism to
phosphorylate glucose and/or fructose in the presence of PEP. We also
cloned and sequenced a DNA fragment coding for a putative polypeptide
showing significant similarity with the enzyme II of the beta-glucoside
PTS of *Escherichia coli*. Taken together, these results show that *A florum*
possesses a fructose-PTS, but not a glucose-PTS, and that the amino acid
sequence deduced from the DNA fragment is related to beta-glucoside and
sucrose enzymes **II** of **PTS** from various
bacteria.

L3 ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2003 ACS on STN
AB A review with 29 refs. on the distribution of phosphotransferase system
(PTS)-sugars in *B. subtilis*, enzyme components of the PTS, and the amino
acid sequences of three **PTS** enzymes **II** involved in
sucrose metab.

L3 ANSWER 5 OF 7 LIFESCI COPYRIGHT 2003 CSA on STN DUPLICATE 3
AB Toluene-treated cells of *Selenomonas ruminantium* HD4 used
phosphoenolpyruvate (PEP) to phosphorylate glucose and sucrose. Glucose
activity was constitutive, while phosphorylation of sucrose was inducible.
Competition experiments indicated that separate phosphotransferase (
PTS) enzymes **II** were present for glucose and
sucrose, but it appeared that maltose was hydrolysed by an
inducible extracellular maltase and then transported by the glucose PTS.
S. ruminantium HD4 grew more slowly on maltose than glucose or sucrose
and the specific activity of maltase was rate limiting. The maltase was
competitively inhibited by glucose and sucrose. Xylose was not
phosphorylated by PEP or ATP, and its uptake was inhibited by the
protonophore carbonyl cyanide m-chlorophenylhydrazone (CCCP), and by
chlorhexidine diacetate. The absence of PEP-dependent phosphorylation and
the effects of CCCP suggested that xylose was transported by an active
transport mechanism.

=>
=> dis his

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FILE 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS,
NTIS, ESBIOBASE, BIOTECHNO, WPIDS' ENTERED AT 21:07:27 ON 30 SEP 2003

L1 9200 S PTS (3A) II
L2 20 S L1 (5A) SUCROSE
L3 7 DUP REM L2 (13 DUPLICATES REMOVED)

=> log h

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
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Search in ENZYME for: pts ii

Release 33, September 2003, and updates up to 28-Sep-2003

Please choose one of the following entries:

2.7.1.69

Protein-N(pi)-phosphohistidine-sugar phosphotransferase.

(AN: Enzyme II of the phosphotransferase system.

PTS permease.

PEP-sugar phosphotransferase enzyme II.)

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